

**CRAB ORCHARD NATIONAL WILDLIFE REFUGE CERCLA PROJECT
MONTHLY PROGRESS REPORT
JUNE 2018**

**ADDITIONAL AND UNCHARACTERIZED SITES
OPERABLE UNIT (AUS OU)**

1.0 Actions toward Achieving Compliance

Feasibility Study (FS).

The U.S. Fish and Wildlife Service (FWS) continues to provide technical direction to Shannon and Wilson Inc. (SWI) on the draft FS. The updated master workbook matrix containing the agency comments and written responses for the draft pilot FS and Groundwater Risk Assessment was distributed to the agencies on June 4th and June 25th. FWS met with U.S. Environmental Protection Agency (USEPA) and Illinois EPA (by phone) on June 6th to discuss agency comments and concerns on the draft pilot FS. USEPA's concerns included remedy area sizes and additional analysis/justification for alternatives evaluation and ranking. The Agencies participated in a conference call on June 20th to continue discussion of Agency concerns on the RI/FS. The USACE distributed a draft tech memo on the limitations and uncertainties on the baseline ecological risk assessment on June 25th. The draft FS is targeted for the timeframe between later 2018 and early 2019.

Area 8 Copper Site

The pond is contaminated with dissolved copper from buried waste in a dump along the shoreline and beneath the water. The pond in Area 8 South discharges surface water through a culvert and overflows a low spot of the road under heavy rain events or high water levels into the creek. Surface water samples are collected monthly and tested for dissolved copper at a location near the culvert that discharges into the creek and where it overflows the low spot of the road. The dissolved copper concentration of 9.1 ug/l in a surface water sample collected June exceeded the chronic aquatic water quality criteria. Concentrations of dissolved copper have continued to decline and hardness level continued to increase since March 2018. These concentrations appear to be influenced by rainfall and stream flows.

Draft Evaluation of Future Groundwater Risk

The results of the evaluation indicated risks for human and ecological receptors and pathways related to potable and non-potable uses associated with the purposes of the Federal facility including conservation, recreation, industrial, and agricultural. FWS continues to revise the Groundwater Risk Assessment.

2.0 Status/Results of Sampling, Tests, and Other Data

- The results for dissolved copper and hardness parameters, calcium and magnesium, were received for the surface water sample collected June 13th from Area 8 South Copper Pond. The dissolved copper concentration of 9 ug/L exceeded the water quality criteria for the protection of aquatic life (chronic criteria of 6.7 ug/L).

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3.0 Actions Scheduled for Next Month

- Continue to provide technical direction to S&W on preparation of the FS.
- Evaluate results of monitored natural attenuation bench study.
- Revise tech memos for the Groundwater Risk Assessment and Sewer Line Vapor Threat Evaluation of Area 11.
- Explore options for management or containment of surface water at Area 8 Copper Pond.
- Conduct surface water sampling at Area 8 Copper Pond.
- Participate in a conference call with S&W and USGS on July 9th.

4.0 Modification or Delays Encountered or Anticipated

None to report.

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AREA 7 PESTICIDES SITE

1.0 Actions toward Achieving Compliance

The FWS continues to provide technical direction to TRC on the implementation of the removal action. A Remedial Design Removal Action (RD/RA) Work Plan is being prepared and will be attached to a Consent Decree to define the scope of work for implementation of the response action.

The Illinois Environmental Protection Agency (IEPA) provided comments on the Removal Action Construction Storm Water Pollution Prevention Plan on June 4th. Written responses to the U.S. Army Corps of Engineers (USACE) comments on the RD/RA Work Plan were distributed on June 4th. The USACE provided its evaluation and additional comments on the RD/RA Work. A meeting/conference call was held June 6th to discuss Agency comments on the RD/RA Work Plan and Sampling and Analysis Plan (SAP). The draft final RD/RA Work Plan and written responses to Agency comments were made available to the Agencies via link on June 13th. The USEPA provided its evaluation of the written responses to comments on the RD/RA Work Plan on June 18th. The Final RD/RA Work Plan was made available to the Agencies via link on June 23rd.

The SAP consists of a Field Sampling Plan and Quality Assurance Project Plan (QAPP) Addendum. The draft final SAP along with the written responses to USEPA comments were distributed to the Agencies for review on June 18th. Once the SAP is finalized, soil testing will be conducted using a mobile lab. The refined excavation boundary maps will be included in the RD/RA Work Plan. FWS distributed SRS' audit memo and laboratory audit checklist and TRC's draft site restoration plan for Agency review on June 28th. The restoration plan will be implemented once soil excavation is completed. The plan addresses management of concrete, grading, and ground cover and tree planting. Details for actual seed mix and tree species composition are pending.

2.0 Status/Results of Sampling, Tests, and Other Data

None to report.

3.0 Actions Scheduled for Next Month

- Continue coordination and planning for the RD/RA.
- Finalize SAP.
- Review the draft Consent Decree.

4.0 Modification or Delays Encountered or Anticipated

None to report.

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5.0 Other Significant Activities

None to report.

6.0 Personnel Changes

None to report.

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PCB OPERABLE UNIT

1.0 Actions toward Achieving Compliance

Operations and Maintenance

Maintenance repairs were completed on June 8th to address the system shut-down which occurred on May 31st due to low pressure. The repairs consisted of replacement of the pump. Operations and monitoring for the Plume One pump and treatment system continued. The average flow through the system for the month was 3.2 gallons per minute. No PCBs were detected in the effluent. Wastes generated from operation and maintenance activities (i.e. groundwater sampling and carbon change out) were shipped off-site for disposal on June 5th.

Plume Two Remedial Design

The consent decree amendment for the Plume Two interim remedy is under review by U.S. Department of Justice.

2.0 Status/Results of Sampling, Tests, and Other Data

None to report.

3.0 Actions Scheduled for Next Month

The Seventh Annual Report (2018) is being prepared and will be submitted to Schlumberger and the Agencies.

The QAPP and O&M Plan are being updated to be consistent with the USEPA Uniform Federal Policy for QAPP and reflect changes in project organization due to shift in responsibilities from Schlumberger to the FWS.

4.0 Modification or Delays Encountered or Anticipated

None to report.

5.0 Other Significant Activities

None to report.

6.0 Personnel Changes

None to report.